INDEX TO VOLUME 25

The index covers only the major papers, their authors, and principal headings. It does not include the abstracts. For the latter there is a separate index to authors on pages 147A through 157A. Minutes of business meetings, officers, and reports are entered only under American Society of Zoologists.

Abstracts, see note above.
  Index of authors, annual meeting, Baltimore, Maryland, 147A–157A.
  Key word index, 158A–165A.
  Of annual meeting, Baltimore, Maryland, 1A–146A
ADVANCES IN CRUSTACEAN ENDOCRINOLOGY, 153–284.
  Crustacean chromatophores, 233–252.
  Crustacean hyperglycemic neuropeptides, 207–221.
  Hormonal control of molting, 179–185.
  Interacting controls in crustacean molting, 275–284.
  Introduction, 155–156.
  Mode of action of CHH, 223–232.
  Neuroendocrine rhythmicity in crustaceans, 265–274.
  Neurohormones and osmoregulation, 253–263.
  Neuropeptides of the crab sinus gland, 157–171.
  Radioimmunoassay and crustacean ecdysteroids, 173–178.
  Uptake and binding of moulting hormones, 187–196.
  Vitellogenesis and its control, 197–206.
American Society of Zoologists,
  Committees, vi–vii.
  Divisional officers, vi.
  Financial statement, xii–xiii.
  Minutes of annual business meeting, viii–xi.
  Officers for 1985, vi.
  Presidents, v.
American Zoologist,
  Directions for authors, cover 1.
  Editorial board, cover 1.
  Statement of ownership, xix.
  Subscriptions, cover 1.
  Twenty-fifth Anniversary page, i.
  Plenary lectures commemorating the twenty-fifth anniversary of the *American Zoologist*, 665–777.
ANDERSON, GARY AND NATHAN H. HART, Films and videotapes in human ecology, 477–481.
ANDREWS, HOWARD, see SILVER, RAE *et al.*
ANIMAL ENERGETICS: AMPHIBIANS, REPTILES, AND BIRDS, 929–1018.
  Anaerobiosis in amphibians and reptiles, 945–954.
  Ectotherm energy budgets, 973–986.
  Introduction, 931–932.
  Metabolic correlates of anuran behavior, 987–997.
  Nutritional ecology of endotherms, 955–964.
  Operative temperatures, 933–943.
  Reproductive adaptations of land iguanas, 1009–1018.
  Temperature and activity bioenergetics, 965–972.
  Water-energy relations of reptilian young, 999–1008.
ARÉCHIGA, HUGO, JOSE LUIS CORTES, UBALDO GARCIA, AND LEONARDO RODRIGUEZ-SOSA, Neuroendocrine correlates of circadian rhythmicity in crustaceans, 265–274.
ATKINSON, JAMES W., Models and myths of science: Views of the elephant, 727–736.
BAKKEN, GEORGE S., WILLIAM R. SANTEE, AND DALE J. ERSKINE, Operative and standard operative temperature: Tools for thermal energetics studies, 933–943.
BALL, GREGORY F. see SILVER, RAE *et al.*
Behavior, paternal, 779–923.
BERN, HOWARD A., The elusive urophysis—Twenty-five years in pursuit of caudal neurohormones, 763–769.
BIERNE, JACQUES, Histocompatibility in nemertines: Fates of multiparental *Lineus* constructed by grafting of pieces from many donors, 135–144.
BOOK REVIEWS, 285–286; 643–645; 925–928; 1125–1127.
BRESLOW, LESTER, Trends in health—Ecological consequences for the human population, 433–439.
BROWN, RICHARD E., Hormones and paternal behavior in vertebrates, 895–910.
BROWN, RICHARD E., Introduction to the symposium: Paternal behavior, 781–783.
BUSSE, CURT D., Paternity recognition in multi-male primate groups, 873–881.
BYRD, KENNETH E., Research in mammalian mastication, 365–374.
CHANG, ERNEST S., Hormonal control of molting in decapod Crustacea, 179–185.
CHARNIAUX-COTTON, HÉLÈNE, Vitellogenesis and its control in malacostracan Crustacea, 197–206.
CHARNOV, ERIC L., see LAMB, MICHAEL E. *et al.*
COLWELL, ROBERT K., The evolution of ecology, 771–777.
COMPARATIVE BIOLOGY OF NEMERTINES, 1–151.
  Ecology of nemertean egg predators, 127–134.
  Epilogue, 145–151.
  Evolution of land nemertines, 15–21.
  Foregut formation of the nemerteans, 23–36.
  Histocompatibility in nemertines, 135–144.
  Introduction, 3.
  Nemertean feeding biology, 113–125.
  Nemertine toxins, 99–111.
  Neuroendocrine devices in the Nemertina, 73–85.
  Standardized descriptions of nemerteans, 5–14.
  Structure of the nemertine integument, 37–51.
  The stylet apparatus of nemerteans, 87–97.
  Ultrastructure and nemertine evolution, 53–71.

COOKE, IAN, see NEWCOMB, ROBERT *et al.*
COOPER, EDWIN LOWELL, Comparative immunology, 648–664.
CORTES, JOSE LUIS, see ARÉCHIGA, HUGO *et al.*
Crustacean endocrinology, advances in, 153–284.
DEWSBURY, DONALD A., Paternal behavior in rodents, 841–852.
DUELLMAN, WILLIAM E., Systematic zoology: Slicing the Gordian knot with Ockham's razor, 751–762.
EHRLICH, ANNE H., The human population: Size and dynamics, 395–406.
EHRLICH, PAUL R., Human ecology for introductory biology courses: An overview, 379–394.
Energetics, animal: Amphibians, reptiles, and birds, 929–1018.
ENGLISH, ARTHUR WM., Limbs *vs.* jaws: Can they be compared?, 351–363.
ERICKSON, BRUCE W., see LITMAN, GARY W.
ERSKINE, DALE J., see BAKKEN, GEORGE S. *et al.*
FARNER, DONALD S., Introduction: Plenary lectures commemorating the twenty-fifth anniversary of the *American Zoologist*, 669.
FERRARIS, JOAN D., Putative neuroendocrine devices in the nemertina—an overview of structure and function, 73–85.
FINGERMAN, MILTON, The physiology and pharmacology of crustacean chromatophores, 233–252.
FISCHER, JOHN L., Science as a way of knowing: Man and food, 407–413.
GANS, CARL, Differences and similarities: Comparative methods in mastication, 291–301.
GANS, CARL, Vertebrate morphology: Tale of a phoenix, 689–694.
GARCIA, UBALDO, see ARÉCHIGA, HUGO *et al.*
GATTEN, ROBERT E., JR., The uses of anaerobiosis by amphibians and reptiles, 945–954.
GIBSON, RAY, The need for a standard approach to taxonomic descriptions of nemerteans, 5–14.
GORNIAK, GERARD C., Introduction to the symposium: Mammalian mastication: An overview, 289.
GORNIAK, GERARD C., Trends in the actions of mammalian masticatory muscles, 331–337.
GREENBERG, MICHAEL J., Ex bouillabaisse lux: The charm of comparative physiology and biochemistry, 737–749.
GROSS, MART R. AND R. CRAIG SARGENT, The evolution of male and female parental care in fishes, 807–822.
HAILMAN, JACK P., Ethology, zoosemiotic and sociobiology, 695–705.
HARDIN, GARRETT, Human ecology: The subversive, conservative science, 469–476.
HART, NATHAN H., see ANDERSON, GARY.
HERRING, SUSAN W., The ontogeny of mammalian mastication, 339–349.
Human ecology, science as a way of knowing—, 375–641.
HYLANDER, WILLIAM L., Mandibular function and biomechanical stress and scaling, 315–330.
IWATA, FUMIO, Foregut formation of the nemerteans and its role in nemertean systematics, 23–36.
JAROS, PETER P., see KELLER, RAINER *et al.*
JEGLA, THOMAS C., Introduction to the symposium honoring Professors Dorothy Bliss and Lewis Kleinholtz: Advances in crustacean endocrinology, 155–156.
KEGEL, GÜNTER, see KELLER, RAINER *et al.*
KELLER, RAINER, PETER P. JAROS, AND GÜNTER KEGEL, Crustacean hyperglycemic neuropeptides, 207–221.
KEM, WILLIAM R., Structure and action of nemertine toxins, 99–111.
KING, JAMES R. AND MARY E. MURPHY, Periods of nutritional stress in the annual cycles of endotherms: Fact or fiction?, 955–964.
KURIS, ARMAND M., see WICKHAM, DANIEL E.
KLEIMAN, DEVRA G., Paternal care in New World primates, 857–859.
LAMB, MICHAEL E., JOSEPH H. PLECK, ERIC L. CHARNOV, AND JAMES A. LEVINE, Paternal behavior in humans, 883–894.
LEVINE, JAMES A., see LAMB, MICHAEL E. *et al.*
LITMAN, GARY W. AND BRUCE W. ERICKSON, A molecular genetic approach to understanding the evolution of immunoglobulin gene structure and diversity, 713–726.
LONDERSHAUSEN, MICHAEL AND KLAUS-DIETER SPINDLER, Uptake and binding of moulting hormones in crayfish, 187–196.
MALCOLM, JAMES R., Paternal care in canids, 853–856.
MAMMALIAN MASTICATION: AN OVERVIEW, 287–374.
  Actions of masticatory muscles, 331–337.
  Comparison in mastication, 291–301.
  Introduction, 289.
  Limbs *vs.* jaws, 351–363.
  Mandibular stress and scaling, 315–330.
  Research in mammalian mastication, 365–374.
  The ontogeny of mammalian mastication, 339–349.
  Ungulate jaw shape, 303–314.
MANTEL, LINDA H., Neurohormonal integration of osmotic and ionic regulation, 253–263.
Mastication, mammalian: An overview, 287–374.
MAY, ROBERT M., Ecological aspects of disease and human populations, 441–450.
MCDERMOTT, JOHN J. AND PAMELA ROE, Food, feeding behavior and feeding ecology of nemerteans, 113–125.
MOORE, JANET, The distribution and evolution of terrestrial nemertines, 15–21.
MOORE, JOHN A., Science as a way of knowing—Human ecology, 483–637.
MOORE, JOHN A., Science as a way of knowing—Human ecology. Opening remarks, 377–378.
MURPHY, MARY E., see KING, JAMES R.
Nemertines, comparative biology of, 1–151.
NEWCOMB, ROBERT, EDWARD STUENKEL, AND IAN COOKE, Characterization, biosynthesis, and release of neuropeptides from the X-organ–sinus gland system of the crab, *Cardisoma carnifex*, 157–171.
NORENBURG, JON L., Structure of the nemertine integument with consideration of its ecological and phylogenetic significance, 37–51.
NORENBURG, JON L., see ROE, PAMELA.
O'CONNOR, JOHN D., Radioimmunoassay and the characterization of crustacean ecdysteroids, 173–178.

PALADINO, FRANK V., Introduction to the symposium: Animal energetics: Amphibians, reptiles, and birds, 931–932.
PALADINO, FRANK V., Temperature effects on locomotion and activity bioenergetics of amphibians, reptiles, and birds, 965–972.
Past-presidential address, 648–664.
PATERNAL BEHAVIOR, 779–923.
Avian parental care, 823–840.
Effects of paternal presence, 911–922.
Introduction, 781–783.
Male–infant interactions, 861–871.
Parental care evolution in fishes, 807–822.
Paternal behavior in humans, 883–894.
Paternal behavior in rodents, 841–852.
Paternal care in canids, 853–856.
Paternal care in New World primates, 857–859.
Paternity recognition in primates, 873–881.
Terrestrial arthropod paternal investment, 785–805.
Vertebrate hormones and paternal behavior, 895–910.
PENNAK, ROBERT W. The fresh-water invertebrate fauna: Problems and solutions for evolutionary success, 671–687.
PIERCE, G. BARRY, Carcinoma is to embryology as mutation is to genetics, 707–712.
PITTS, JAMES N., JR., On the trail of atmospheric mutagens and carcinogens: A combined chemical/microbiological approach, 415–431.
PLECK, JOSEPH H., see LAMB, MICHAEL E. *et al.*
PLENARY LECTURES COMMEMORATING THE TWENTY-FIFTH ANNIVERSARY OF THE AMERICAN ZOOLOGIST, 565–777.
Cancer/embryology: Mutation/genetics, 707–712.
Ethology, zoosemiotic and sociobiology, 695–705.
Evolution of immunoglobulin genes, 713–726.
Ex bouillabaisse lux, 737–749.
Fresh-water invertebrates: Adaptions, 671–687.
Introduction, 669.
Models and myths of science, 727–736.
Systematic zoology, 751–762.
The evolution of ecology, 771–777.
Urophysial neurohormones, 763–769.
POUGH, F. HARVEY, see TAIGEN, THEODORE L.
RADINSKY, LEONARD, Patterns in the evolution of ungulate jaw shape, 303–314.
RAY, G. CARLETON, Man and the sea—The ecological challenge, 451–468.
RISER, NATHAN W., Epilogue: Nemertinea, a successful phylum, 145–151.
RODRIGUEZ-SOSA, LEONARDO, see ARÉCHIGA, HUGO *et al.*
ROE, PAMELA AND JON L. NORENBURG, Introduction to the sympoisum: Comparative biology of nemertines, 3.
ROE, PAMELA, see MCDERMOTT, JOHN J.
RUPPERT, E. E., see TURBEVILLE, J. M.
SANTEE, WILLIAM R., see BAKKEN, GEORGE S. *et al.*
SARGENT, R. CRAIG, see GROSS, MART R.
SCIENCE AS A WAY OF KNOWING—HUMAN ECOLOGY, 375–641.
Ecology of human host–pathogen systems, 441–450.
Films and videotapes, 477–481.
Human ecology, 483–637.
Human ecology—An overview, 379–394
Human ecology: Subversive and conservative, 469–476.
Index, 639–641.
Introduction, 377–378.
Man and food, 407–413.
Man and the sea, 451–468.
Search for atmospheric mutagens, 415–431.
The human population: Size and dynamics, 395–406.
Trends in health, 433–439.
SEDLMEIER, DIETRICH, Mode of action of the crustacean hyperglycemic hormone, 223–232.
SILVER, RAE, HOWARD ANDREWS, AND GREGORY F. BALL, Parental care in an ecological perspective: A quantitative analysis of avian subfamilies, 823–840.
SKINNER, DOROTHY M., Interacting factors in the control of the crustacean molt cycle, 275–284.
SMITH, ROBERT L., see ZEH, DAVID W.
SNELL, HOWARD L. AND C. RICHARD TRACY, Behavioral and morphological adapations by Galapagos land iguanas (*Conolophus subcristatus*) to water and energy requirements of eggs and neonates, 1009–1018.
SNELL, HOWARD L., see TRACY, C. RICHARD.
SPINDLER, KLAUS-DIETER, see LONDERHAUSEN, MICHAEL.
SPOTILA, JAMES R. AND EDWARD A. STANDORA, Energy budgets of ectothermic vertebrates, 973–986.
STANDORA, EDWARD A., see SPOTILA, JAMES R.
STRICKER, STEPHEN A., The stylet apparatus of monostiliferous hoplonemerteans, 87–97.
STUENKEL, EDWARD, see NEWCOMB, ROBERT *et al.*
TAIGEN, THEODORE L. AND F. HARVEY POUGH, Metabolic correlates of anuran behavior, 987–997.
TAUB, DAVID MILTON, Male–infant interactions in baboons and macaques: A critique and reevaluation, 861–871.
TRACY, C. RICHARD AND HOWARD L. SNELL, Interrelations among water and energy relations of reptilian eggs, embryos, and hatchlings, 999–1008.
TRACY, C. RICHARD, see SNELL, HOWARD L.
TURBEVILLE, J. M. AND E. E. RUPPERT, Comparative ultrastructure and the evolution of nemertines, 53–71.
WICKHAM, DANIEL E. AND ARMAND M. KURIS, The comparative ecology of nemertean egg predators, 127–134.
WUENSCH, KARL L., Effects of early paternal presence upon nonhuman off-springs' development, 911–923.
ZEH, DAVID W. AND ROBERT L. SMITH, Paternal investment by terrestrial arthropods, 785–805.